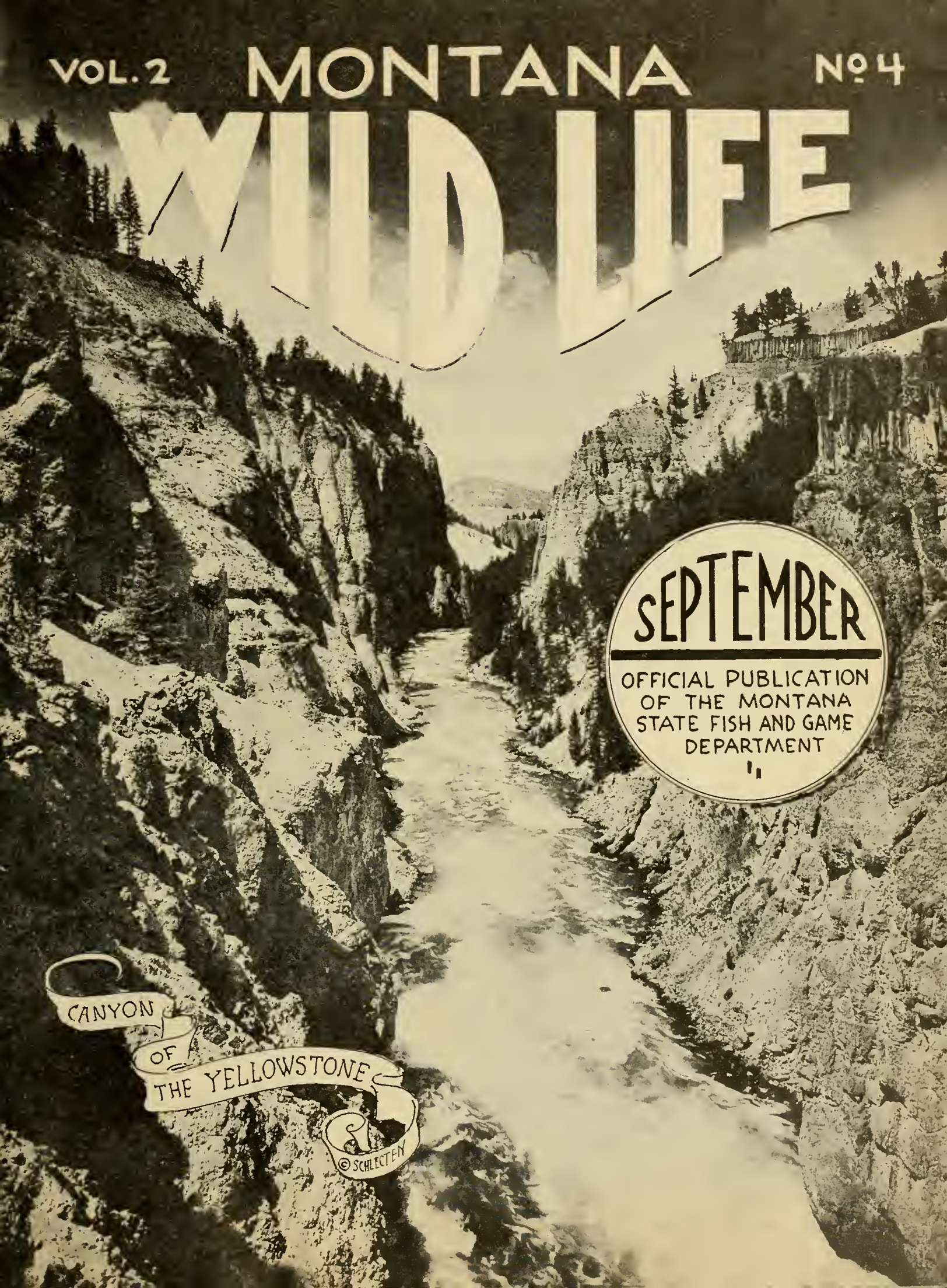
VOL. 2

MONTANA WILDLIFE

No. 4



SEPTEMBER

OFFICIAL PUBLICATION
OF THE MONTANA
STATE FISH AND GAME
DEPARTMENT

CANYON OF THE YELLOWSTONE

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A Song for Father

By James Longworth Sowers

My Dad!
I am sincerely grateful—glad
He didn't know so much of books,
Business, banks and real estate;
But he knew woodland dells and nooks.
And lore of birds. Of traps and bait
A ken he had.

Such fun!
When tasks were finished, day was done,
Away we went for woods or creek,
To hold communion with the trees,
To brighten up a pallid cheek
Or strengthen little weakly knees;
Learn rod and gun.

Great heart!
Knew nothing of the business mart;
But eye of eagle, deadly stealth,
He had in woods; knew where to look
For hawk and squirrel; had a wealth
Of knowledge about line and hook.
He knew his part.

His will
May read—(ah yes, he's with me still),
That all he has to leave to me
Are mem'ries, health and love of wild,
A name carved on an old beech tree;
The happy thoughts of sire and child;
A windy hill.

—Outdoor America.

MONTANA WILD LIFE

The Official Publication of The State Fish and Game Commission

VOL. II. HELENA, MONTANA, SEPTEMBER, 1929. NO. 4.

Mallard Shootin' Time Is Here

MONTANA'S migratory waterfowl season opened September 16 when the sun sent its first streaks of light over the swamps and lakes announcing the return of a shooting season that promises to be beset with difficulties. Reports from throughout the state indicate that the long, dry summer has caused water holes, creeks and nesting areas to go dry. The majority of the waterfowl are to be found on the larger bodies of water, on Red Rock Lakes, Lake Bowdoin and such reservoirs as Lake Helena, Lake Sewell, Hauser Lake and Meadow Lake. Preliminary reports from Lake Bowdoin, where Deputy Harry Cosner holds sway, were to the effect that an estimate of the number of waterfowl for biological summaries was impossible because of the thousands of milling birds circling the shooting grounds.

Nine Pipe Reservoir, which has for years provided wholesome shooting areas, is so low that the mallard families have packed their trunks, formed the "V" in the dawn and headed toward damper vicinities. Results of the planting of duck food in lakes and reservoirs by the State Fish and Game Commission have become apparent. Sportsmen as well as the wardens who make regular trips of inspection report migratory waterfowl remaining near these spots when weather conditions have raised havoc with less favorable feeding areas.

Results of a survey of migratory wildfowl conditions prevailing during the last hunting season made by the American Wild Fowlers has been compiled and distributed and the information it contains is particularly interesting because of great variation of the reports. The compilation contains 51 reports, 42 of them being from wardens and other officers concerned with game administration, and nine from club members and others. Of the game officers reporting 10 reported an increase in waterfowl, 22 average conditions, and 10 a decrease. All others reported a decrease. Reports were received from all parts of the country.

From Montana and the far west reports are uniformly discouraging, the only encouragement being a statement that duck sickness, which has been responsible for such a tremendous loss of birds, has not been serious lately.

In California several reports coincide in the statement that practically the only marsh land left suitable for duck feeding areas is that which is held by duck clubs for shooting preserves.

Unfortunately, most of the area formerly used by ducks and now drained is used for agriculture and can never be restored.

Several club members referring to the Imperial Valley say that the decrease in ducks has been tremendous. One writes that they have now about five birds to every hundred we had 25 years ago.

In the middle west region, embracing states east of the Rocky Mountains and west of the Mississippi Valley, reports were general that there was a decrease except in Montana and a notable exception in Kansas, where birds resorted in countless numbers, probably owing to improved feeding conditions.

In the north central region, a more nearly average flight was reported, although a persistent decrease covering a period of years was indicated.

In the southern Mississippi Valley reports were most conflicting. Ducks evidently resorted to especially favorable feeding areas in great numbers, from some of which distressing reports of slaughter have come. A marked conflict occurs in reports from Reelfoot Lake, the U. S. game protector reporting the season's kill at from 125,000 to 150,000 for the season 1927-28, which was reduced to from 100,000 to 120,000 last season, while the state game warden estimated the kill last season at about 300,000.

Time Table for Duck Hunters

THROUGH the courtesy of The Montana Record-Herald of Helena, MONTANA WILD LIFE is enabled to present this official sunrise and sunset table to sportsmen of the state. These statistics have been prepared under supervision of The Record-Herald and have been approved by the State Fish and Game Department. The figures given below are Helena time:

	SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
Date	Sunrise	Sunset	Sunrise	Sunset	Sunrise	Sunset	Sunrise	Sunset
1	.....	.....	6:27 a.	6:08 p.	7:11 a.	5:12 p.	7:54 a.	4:41 p.
2	.....	.....	6:28 a.	6.06 p.	7.13 a.	5:11 p.	7:55 a.	4:40 p.
3	.....	.....	6:30 a.	6:04 p.	7:14 a.	5:09 p.	7:56 a.	4:40 p.
4	.....	.....	6:31 a.	6:02 p.	7:16 a.	5:08 p.	7:57 a.	4:40 p.
5	.....	.....	6:32 a.	6:00 p.	7:17 a.	5:06 p.	7:58 a.	4:40 p.
6	.....	.....	6:34 a.	5:58 p.	7:18 a.	5:05 p.	7:59 a.	4:39 p.
7	.....	.....	6:35 a.	5:57 p.	7:20 a.	5:04 p.	8:00 a.	4:39 p.
8	.....	.....	6:26 a.	5:55 p.	7:22 a.	5:02 p.	8:10 a.	4:39 p.
9	.....	.....	6:38 a.	5:53 p.	7:23 a.	5:01 p.	8:02 a.	4:39 p.
10	.....	.....	6:39 a.	5:51 p.	7:24 a.	5:00 p.	8:03 a	4:39 p.
11	.....	.....	6:41 a.	5:49 p.	7:26 a.	4:58 p.	8:04 a.	4:39 p.
12	.....	.....	6:42 a.	5:47 p.	7:27 a.	4:57 p.	8:05 a.	4:39 p.
13	.....	.....	6:44 a.	5:45 p.	7:29 a.	4:56 p.	8:06 a.	4:39 p.
14	.....	.....	6:45 a.	5:43 p.	7:30 a.	4:55 p.	8:07 a.	4:39 p.
15	.....	.....	6:46 a.	5:41 p.	7:32 a.	5:54 p.	8:08 a.	4:39 p.
16	6:07 a.	6:39 p.	6:48 a.	5:40 p.	7:33 a.	4:52 p.	8:08 a.	4:39 p.
17	6:08 a.	6:37 p.	6:49 a.	5:38 p.	7:35 a.	4:51 p.	8:09 a.	4:40 p.
18	6:10 a.	6:35 p.	6:50 a.	5:36 p.	7:36 a.	4:50 p.	8:10 a.	4:40 p.
19	6:11 a.	6:32 p.	6:52 a.	5:34 p.	7:38 a.	4:49 p.	8:10 a.	4:40 p.
20	6:12 a.	6:30 p.	6:53 a.	5:32 p.	7:39 a.	4:49 p.	8:11 a.	4:41 p.
21	6:14 a.	6:28 p.	6:55 a.	5:31 p.	7:40 a.	4:48 p.	8:11 a.	4:41 p.
22	6:15 a.	6:26 p.	6:56 a.	5:29 p.	7:42 a.	4:47 p.	8:12 a.	4:42 p.
23	6:16 a.	6:24 p.	6:58 a.	5:27 p.	7:43 a.	4:46 p.	8:12 a.	4:42 p.
24	6:18 a.	6:22 p.	6:59 a.	5:25 p.	7:44 a.	4:45 p.	8:13 a.	4:43 p.
25	6:19 a.	6:20 p.	7:01 a.	5:23 p.	7:46 a.	4:44 p.	8:13 a.	4:44 p.
26	6:20 a.	6:18 p.	7:02 a.	5:22 p.	7:47 a.	4:44 p.	8:14 a.	4:44 p.
27	6:22 a.	6:16 p.	7:04 a.	5:20 p.	7:48 a.	4:43 p.	8:14 a.	4:45 p.
28	6:23 a.	6:14 p.	7:05 a.	5:18 p	7:50 a.	4:43 p.	8:14 a.	4:46 p.
29	6:24 a.	6:12 p.	7:07 a.	5:17 p.	7:51 a.	4:42 p.	8:14 a.	4:47 p.
30	6:26 a.	6:10 p.	7:08 a.	5:15 p.	7:52 a.	4:41 p.	8:14 a.	4:48 p.
31	.....	.....	7:10 a.	5:14 p.	.....	.....	8:14 a.	4:48 p.

Eastern Montana time, based on Miles City data, is 25 minutes earlier than Helena time given in the tabulation above

Western Montana sportsmen must remember that Missoula time is eight minutes later than Helena time quoted in the table

All authentic calculations of times of sunrise and sunset are for flat horizons, hence allowance must be made for irregularities of the horizon.

The federal law protecting migratory waterfowl provides that shooting may start ONE-HALF HOUR BEFORE SUNRISE and must stop at sunset.

The season opened September 16 and closes December 31, hoth dates inclusive.

The bag limit is 25 ducks, 8 geese or brant, 25 Wilson snipe or jacksnipe, 25 rails, coot and gallinule.

Protected birds include sandhill and whooping cranes, swan, wood duck, avocet, curlew, dowitcher, godwit, knot, upland plover, kildeer, sandpiper, willet and other shore birds except blackbellied and golden plover greater and lesser yellowlegs.

Migratory waterfowl, when taken in accordance with the law, may be possessed by the person so taking them during the open season where killed and for an additional period of 10 days next succeeding December 31.

Open Season on Huns and Chinks

MONTANA'S State Fish and Game Commission has taken further courageous, careful steps in the effort to conserve what remains of wild life of the Treasnre State for years to come. At the last meeting of the Commission at Anaconda, action important to Montana sportsmen was taken:

The season on muskrats throughout the state was closed for one year beginning August 29, 1929.

The season on all upland birds, including prairie chickens, blue grouse, pinnated grouse and native pheasants has been closed for the year.

For the first time since Hungarian partridges were planted in the state, a season extending from November 24 to November 28, inclusive, was declared, in designated areas.

The open season on Chinese pheasants in certain designated areas was placed at November 24 to November 28, inclusive. The bag limit is three birds which may include three Hungarians of either six or three Chinese cocks, it being the intent of the order to make the limit three birds in a mixed bag or as indicated. Not more than six in possession at any one time is permissible.

Those attending the meeting of the Commission at the Montana Hotel at Anaconda, August 29, were: Chairman Thomas N. Marlowe, J. L. Kelly, E. A. Wilson, W. K. Moore, and Secretary R. H. Hill. There were also present: Dr. J. H. Treece, Field Assistant; J. F. Hendricks, Superintendent State Game Farm, and Deputy Game Wardens J. P. McCaffery and W. A. Hill.

Mr. Marlowe brought up the subject of closing the open season to the trapping of muskrats throughout the state, also an open season on mountain goats on the west side of the Bitter Root River in Ravalli county.

The season was closed on trapping or taking of muskrats in Montana for one year, beginning with August 29, 1929, unless anyone can show that the muskrats are damaging water works, irrigation ditches or dams. Under these conditions a permit may be obtained from the State Game Warden to trap or destroy the muskrats doing damage at any time during the year.

An open season was declared on mountain goats on the west side of the Bitter Root River in Ravalli county from November 6 to November 15, both dates inclusive; the limit to be one goat of either sex for each person.

The matter of an open season on Chinese pheasants and Hungarian partridges was brought before the Commission by Warden Hill. The following territory was opened to the shooting of Chinese pheasants for the season of 1929:

Flathead county, Petroleum county, Custer county, Yellowstone county, Lewis and Clark county, Fergus county, Broadwater county, Deer Lodge county, Beaverhead county, all that portion of Lake county except that which is drained by the Jocko River and its tributaries; all that portion of Ravalli county south of the Ravalli and Missoula county line and lying north of the Hamilton Heights road which runs east and west through the middle of Sections 13, 14, 15, 16, and part of 17, and an extension of the same line across the remainder of Section 17 and Section 18, all in Township 6, N. of Range 20 W.; all of Missoula county south of a line running east and west through the town of Lolo; and all of that portion of Carbon county lying east of Rock Creek and south of a line running due east and west through the town of Bridger.

The following described territory was opened to the shooting of Hungarian partridges for the season of 1929:

Flathead county, Glacier county, Lewis and Clark county, Teton county, Gallatin county, Deer Lodge county, Yellowstone county, Beaverhead county, all that portion of Lake county except that which is drained by the Jocko River and its tributaries; all that portion of Ravalli county south of the Ravalli and Missoula county line and lying north of the Hamilton Heights road which runs east and west through the middle of Sections 13, 14, 15, 16, and part of 17, and an extension of the same line across the remainder of Section 17 and Section 18, all in Township 6, N. of Range 20 W.; and all of Missoula county south of a line running east and west through the town of Lolo.

The open season on these birds for 1929 begins with November 24 and ends with November 28, both dates inclusive. The bag limit is three birds which may include three Hungarian partridges of either sex or three Chinese cocks or three in the aggregate, it being the intention of the Commission that the bag limit shall be but three birds, whether they be male Chinese pheasants or Hungarian partridges of either sex; and that no person shall have in his possession more than six of any such birds at any one time.

If there are other territories that the citizens desire to be opened the Commission will consider the petitions at a future meeting.

The request of the Custer Rod and Gun Club relative to an eight-day open season on buck deer in Carter, Custer and Powder River counties was again presented to the Commission and the club advised that, under the law, the State Fish and Game Commission has no authority to open these counties to the hunting of deer.

M. E. Fulmer of Butte addressed the Commission relative to his prospective private pond and hatchery and requested permission to purchase the fish in the waters of this pond. It was decided by the Commission that Mr. Fulmer give the Fish and Game Department 10,000 eyed eggs, f. o. b. Anaconda hatchery, in return for the fish which are at the present time in his proposed private pond.

Mr. Hill discussed the letter from J. F. Gould, secretary of the Association of the North Central States Game and Fish Departments, wherein he asked to be advised of how many representatives of the Montana Fish and Game Department would attend the convention of his association, the American Fishery Society and the International Association of Game and Fish Conservation Commission, to be held in Minneapolis. Commissioners W. K. Moore and E. A. Wilson were authorized to attend.

A petition from citizens in the vicinity of Basin, Elliston and Helena relative to closing a portion of the Little Blackfoot River was presented and the Little Blackfoot River and tributaries was closed to fishing from the headwaters to the confluence of Ontario Creek until further orders.

The request of Dr. J. M. Wolfe of White Sulphur Springs, asking the Commission to close all the streams in Meagher county to fishing was read. Dr. Wolfe was advised that the Commission is considering closing the entire state to fishing at a later date.

Chairman Marlowe was requested to communicate with all sportsmen's clubs in the state relative to an advanced closed season on fishing in all the waters of the state.

The petition from residents, citizens and property holders of Liberty and Toole counties, requesting that Bear Gulch Creek in Liberty county be closed to fishing for an indefinite period, was approved.

Mr. Marlowe presented the petition from citizens of the vicinity of Fort

The State Exhibit

IN furthering the campaign of education among sportsmen of the state, the Fish and Game Department has arranged an interesting wild life exhibit which is now making the rounds of Montana fairs. Crowds of interested spectators are rallying around the department display, learning something more of the denizens of woods and waters of their own great Treasure State. In the exhibit are included specimens of elk, deer, antelope, buffalo, bear, wolf, coyote, magpie, badger, bobcat, marmot, porcupine, one of which is an albino captured near Lewistown; Canadian geese, beaver, mountain lion, mink and weasel. The dates filled by this exhibit, which is moved by truck, follow:

Lewistown—Aug. 27-30.
Billings—Sept. 2-6.
Bozeman—Sept. 10-13.
Missoula—Sept. 17-20.
State Fair at Helena—Sept. 23-28.
Hamilton—Oct. 2-4.

In connection with the wild life display, the department has arranged an attractive exhibit of Montana fish at the aquariums provided at Billings, Bozeman and the State Fair at Helena.

Benton, requesting that Cow Creek in Blaine county be closed to fishing for three years, and it was approved.

The letter from the Hill County Rod and Gun Club requesting that all the streams in the counties of Hilt, Blaine and Chouteau be closed to fishing from October 1 to May 21, was read and the club advised that the Commission will take under consideration the matter of closing all the waters of the state and will advise them of action.

The easement given to the Fish and Game Department by the Valier-Montana Land & Water Co. for the purpose of constructing fish traps and spawning station on C-3 Ditch or Canal was accepted and the secretary notified to write to the Valier-Montana Land & Water Co. to express the thanks of the Commission for the easement.

The matter of establishing a spawn-taking station near Lake Francis was discussed and Warden Hill instructed to take up the matter with Dr. I. H. Treece and J. W. Schofield and decide on some definite plan.

Mr. Hill presented the request of the Dawson County Rod and Gun Club for additional help for Mr. Muxlow or that he be placed on full time to devote all of his time in breaking up seining activities at Intake Dam.

The report from the committee appointed by the Southeastern Sportsmen's Association to make an investigation of the pollution problem from the sugar beet factory at Billings and the use of set lines in the Yellowstone and Big Horn Rivers was presented.

The matter of placing a fish ladder at Bonner's Dam and the report of Deputy Game Warden W. A. Hill was discussed and it was decided to write to the Missoula Public Service Company regarding the installation of a fish ladder.

The petition from land owners and lessees of lands within the boundaries of the Grass Valley Game Reserve, demanding that this reserve be opened to the shooting of migratory birds or aholished altogether, was denied as the Commission has no authority to grant it.

Mr. Marlowe presented to the Commission the request of the Flathead sportsmen to close the Lake of the Woods, situated in Flathead county, to fishing, and the lake was closed for two years.

Mr. Marlowe brought to the attention of the Commission the proposition of the Federal Government turning over all of the now remaining public domain to the state to be administered by the state, and advised that, in his opinion, the Fish and Game Department of each state had a great interest in the public domain and thought that the interest of the game departments of the states should be represented in a meeting of this kind and that the fact should be called to the attention of President Hoover. Chairman Marlowe was instructed to take this matter up in proper channels.

Mr. Marlowe discussed the situation at the Nine Pipe Reservoir relative to the loss of fish from the reservoir and the necessity of installing a screen at the ontlet, and he was instructed to look after the screening and the rescuing of fish.

Mr. Marlowe referred to the matter of the large number of suckers and squawfish in the sloughs and streams in the Bitter Root Valley and J. P. Sheehan, foreman of the fish hatchery at Hamilton, was authorized to supervise the seining of these fish.

The matter of securing an option on the Anderson fish hatchery at Emigrant was brought up and Commissioner Wilson reported on his investigation. No action was taken until the possibility of enlarging the Big Timber hatchery is thoroughly investigated. Mr. Crawford was instructed to make an investigation of both places and report his findings as soon as possible.

Warden Hill again referred to the matter relative to Lake Francis and stated that he and Dr. Treece had decided that Kenneth MacDonald be authorized to look after the work of building the fish traps and screen.

Dr. Treece presented to the Commission the easement for the Blacktail rearing ponds and it was accepted.

Dr. Treece was authorized to spend any reasonable sum necessary for the construction of the Blacktail rearing ponds and the rearing pond at Big Hole.

Mr. Marlowe brought up the matter of planting perch in land-locked lakes and Dr. Treece recommended that perch be planted in Echo Lake and Nelson Reservoir. Mr. Marlowe instructed Dr. Treece to look after the planting of perch in any lakes he deemed advisable.

The request from Senator Cooper regarding a rearing pond in Mineral county was brought to the attention of the Commission and Chairman Marlowe and Dr. Treece were authorized to look after the pond.

The matter of the erection of a residence building at the State Game Farm was considered when plans and specifications were submitted by O. J. Christensen. The secretary of the Commission was instructed to advertise for sealed bids for the construction and completion of the residence at the site on the game farm at Warm Springs according to the plans and specifications prepared by O. J. Christensen. Bids are to be submitted to Commissioner Kelly. He was authorized to open them and let the contract, he being given full authority to act for the Commission in every respect. In the call the bidder is requested to furnish a certified check on a responsible bank of 10 per cent of the amount of his bid to assure performance of the contract.

NOT GUILTY

A small boy strolled into a drug store and said to the clerk: "Give me a nickel's worth of asafoetida."

The proprietor wrapped it up and passed it over.

"Charge it," said the boy.

"What name?" queried the druggist.

"Hunnyfunkle."

"Take it for nothing," retorted the languid druggist. "I wouldn't write asafoetida and Hunnyfunkle for no nickel."

At Red Rock Lake In 1923

HERE'S a sight for the sore eyes of Montana duck shooting enthusiasts who have for years bemoaned the apparent shifting of the flight of migratory waterfowl in their north-to-south movement. This picture was taken in September, 1923, on Montana Bar on the east shore of Red Rock Lake in Beaverhead county by Chris Regan, aided by Tom Calpin. It's another demonstration of the need of active conservation movements to restore such bird refuges to their former greatness. The Red Rock Lakes are dotted with private shooting clubs. Years ago thousands of waterfowl dotted the waters. In the picture a group of pelicans is shown backed by several hundred dozing greenheads, geese and teal.

Forest Fires Menace Montana Game

WITH the waning of one of the most disastrous forest fire seasons Montana has witnessed in many years, the question arises in the minds of sportsmen: "What effect have the fires had on our game?" Careful inquiry made by the Fish and Game Department through deputies in the field show that the flames have caused further inroads among the upland game birds, necessarily the blue grouse and native pheasants. The season has been closed for the entire year on these birds because of their rapid disappearance. Many have died from a mysterious disease and the coveys have become scattered. Many fawns have been lost but the adult deer, elk, bear and smaller animals have apparently taken care of themselves. Song birds, easily confused in the smoke and flames, have sacrificed their lives. In several instances reports tell of mother deer turning back into the flames in search of their fawns, only to perish.

While threatening at times, the great fires in the Flathead region did no damage to that paradise of hunters in the South Fork area north of Missoula, J. B. Halm said on his return from fire detail there. Mr. Halm will be remembered by readers of MONTANA WILD LIFE as the Missoula sportsman who hunts with a camera. He spent some time directing the fight against the flames on Sullivan Creek, between Coram and Spotted Bear on the South Fork.

Thirty-three thousand acres of forest were burned there, according to the best estimates obtainable. But the flames scorched timber above the great hunting region which is visited by man Montana hunters each fall. It teems especially with elk drifting in from the Sun River.

As the fires were held in the country north of the principal game areas, it is believed that the holocaust will have no or little effect on hunting this fall.

So far few reports have been received of game destroyed by the forest fires. Men coming out of the East Selway tell of an elk, caught between rocks, which was roasted alive during the time the Locha flames were running fiercely.

The forest fire menace threatened to close two of Idaho's big game sections to hunters.

R. E. Thomas, state game warden, has begun investigation of reports that 50,000 acres of the state game preserve on the Middle Fork of the Salmon River have been partially denuded by fire, with the result that deer, sheep and goats have been forced down into open spaces. Sportsmen of the vicinity fear that the animals would be slaughtered in droves after the deer season opened October 1.

Similar conditions were reported in the Selway game preserves in Idaho and Clearwater counties. A deputy game warden was ordered to make a survey of the amount of land denuded and recommend what additional land should be taken into the preserves to assure protection to the animals. The fires of those regions are still raging.

An order closing 75,000 acres in the vicinity of the Salmon River preserve in Idaho will be issued as soon as the investigation has been completed.

The fear that fall rains washing ashes from forest fires into Idaho streams will turn the creeks into currents of lye water and destroy the fish was expressed in a letter sent to the Idaho state game warden by H. L. Walrath, assistant chief deputy.

In his letter Walrath said: "We are having some bad fires on the Clearwater drainage this summer and we are going to pay for it in fish. The Old Man Creek country is all on fire.

"The Bald Mountain fire is on both sides of the state game preserve, with an estimated area of 60,000 acres. With the continuation of wind it threatened to pass across to Montana. The fire in Lolo Canyon broke out again and the canyon is ablaze on both sides.

"It has gone up the canyon about 15 miles in two days and chances are that the Weippe and Mussel Shell districts will be burned out. When rains come this fall ashes will wash down from these extensive fires and we will lose virtually all fish in the streams involved."

Montana Pickerel

A. C. BAUMGARTNER, president of the Great Falls Sporting Goods Company, who has attained a position of enviable esteem among sportsmen of the state by selling more fishing and hunting licenses than any other dealer, is shown in the picture above with a beautiful catch of huge pickerel taken from Lake Sherburne in Glacier National Park. The State Fish and Game Commission is taking steps to increase the supply of pike, pickerel, catfish and bass—all classed as warm water fish—as well as the gamey trout which abound in the swift waters of the state. These four big fightin' fools provided an afternoon of rare sport for Mr. Baumgartner. They weighed 4½, 8½, 10 and 14½ pounds.

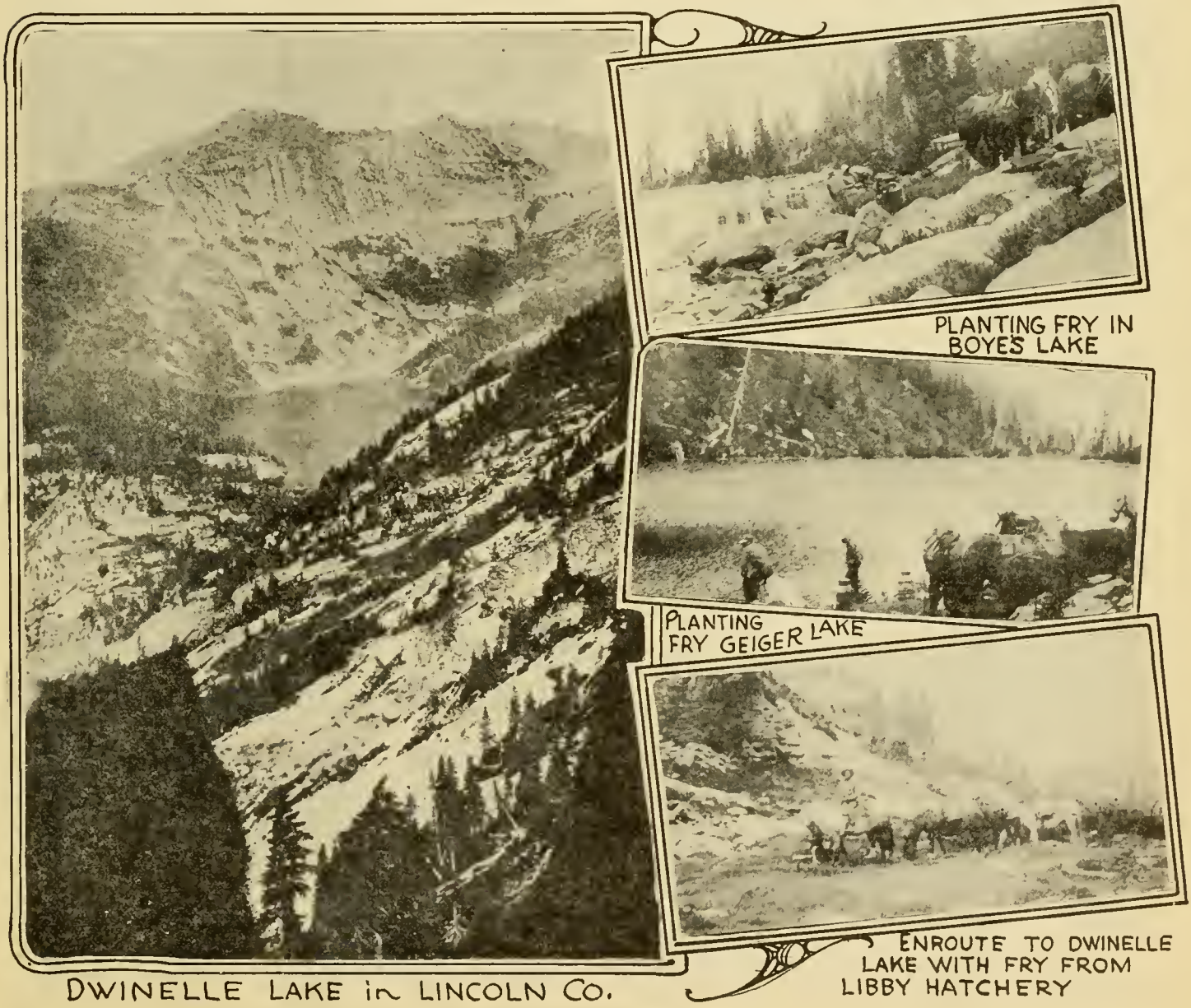
Three Feet of Fight

HERE'S another striking photograph of a Montana bull trout—cannibal of the streams, caught in the South Fork of the Flathead River at the Big Prairie ranger station on the Flathead National Forest. The enemy of game fish measured 36 inches and weighed 17 pounds.

Barren Lakes Stocked With Trout

FREAKS of nature sometimes emphasize the wheeze that "it's an ill wind that blows nobody some good." Few sportsmen of Montana know of the whereabouts of Dwinelle Lake, high in the crags of Lincoln county, but here's a story of taking advantage of natural opportunities that will appeal to the red blood of every angler who keeps in touch with manifold activities of the State Fish and Game Commission in stocking streams and replenishing the supply of fish and game for future generations. Through the courtesy of Deputy Warden William J. Dorrington, whose headquarters are at Libby, the accompanying pictures of this remarkable jaunt are supplied.

Snow fed during the summer months, Dwinelle Lake is almost inaccessible to anglers. No fish of any kind have ever been caught from the lake, according to statements of rangers and wardens familiar with the district. A bolt of lightning that struck the timber during the forest fire season made possible the planting of a supply of trout in this mountain fastness. The fry were taken from the state hatchery at Libby. An empty forest service truck going in to the scene of the fire to bring out fatigued forest rangers who had been fighting the blaze, was called into service, loaded with the cans of fry and started toward the lake near the summit along the boundary between Sanders and Lincoln counties. The truck carried the cans as far as possible. Then an empty pack train, going in to bring out the remaining supplies, was pressed into service. Geiger Lake is in this same isolated vicinity and was restocked on the same trip. Geiger Lake has, however, been stocked for several years and is showing good results. Boye's Lake, another body of mountain water barren of fish, was likewise stocked from the load of fingerlings taken in by truck and pack train. It won't be many years until these gems of the mountains will be eagerly sought by ambitious anglers.



PLANTING FRY IN BOYE'S LAKE

PLANTING FRY GEIGER LAKE

DWINELLE LAKE in LINCOLN CO.

ENROUTE TO DWINELLE LAKE WITH FRY FROM LIBBY HATCHERY

MONTANA STATE FISH AND GAME COMMISSION

COMMISSIONERS.
Thomas N. Marlowe, Missoula, Chairman.
G. T. Boyd, Great Falls.
Joseph L. Kelly, Anaconda.
W. K. Moore, Billings.
E. A. Wilson, Livingston.

ROBERT H. HILL, Helena
State Fish and Game Warden
Secretary.

MONTANA WILD LIFE

The Official Publication of the State
Fish and Game Department.
Published Monthly at Helena, Montana.

FLOYD L. SMITH, Editor.

Subscription Rate $1 per Year—15 Cents per Copy

Advertising Rates on Application.

Copy for advertisements subject to approval of State Commission and must be in the hands of the editor at the State Capitol building, Helena, on the 15th of the month preceding publication date.

VOLUME II. SEPTEMBER, 1929. NUMBER 4.

A TRIBUTE TO MONTANA METHODS

CONSISTENT activity of Montana's Fish and Game Commission in furthering its vast conservation program in woods and waters is winning national attention. Editorial comment of gratifying nature has been made in magazines and newspapers whose editors are watching developments. R. J. Kirkwood, editor of Western-Out-of-Doors, has penned the following editorial in the current edition:

Montana has earned a place among the foremost states of the nation in conservation work through its scientific studies of conditions affecting fish life in Flathead and Georgetown Lakes. The species of fish, both native and introduced, frequenting these waters have been classified and studied so that the Montana State Fish and Game Commission now knows something of the food, habits, range and migratory inclinations of all; it knows to what extent one species preys upon others; it knows which species are, more than others, subject to attacks of parasites; it now knows—and does not have to guess—the relative value and importance of the various species; it has found that some fishes, that heretofore have been despised, are really of value to the state.

These studies have extended over a period of more than twenty years during which time the state has maintained on the shores of Flathead Lake what is said to be the greatest biological station of its kind in the world, supported and operated jointly by the Fish and Game Commission and the State University.

Wisconsin is now engaged in solving scientifically and accurately these problems: How much will forest land be worth 50 years hence if planted under the forest crop tax law now? Why are our prairie chickens disappearing? Does carp seining damage lake bottoms? What kind of fish will live in what kind of waters? And many others.

Washington maintains a marine biological station in connection with the State University where many of the problems affecting the state's food and game fish resources are gradually being solved. Many other states are adopting the methods of modern business and are applying scientific principles to the solution of their fish and game problems.

What is Oregon doing—what can she do—to insure perpetuation of its third largest industry, salmon packing, and to conserve and develop its greatest natural resource, game and game fish?

FOOD HABITS OF THE HUNGARIAN

MONTANA'S Fish and Game Commission has declared a short open season in specified localities on Chinese pheasants and Hungarian partridges and, this year, but little complaint has arisen regarding habits of the birds in grain fields. Preceding the open season last year complaints of farmers were numerous but they soon learned of their mistakes.

Food habits of the Hungarian partridge are described by Benjamin Lawton, Game Commissioner in Alberta, as follows:

"With respect to the food habits of the Hungarian partridge, I find that there are no complaints as to these birds eating grain. From all stomachs examined I am satisfied that they confine themselves almost entirely to weed seeds, worms and insects. In the Viking district—some eighty miles east of Edmonton—one or two of the farmers complained of the birds damaging their grain before it was cut. This was due to the fact that coming into the grain field the birds in a flock (with wings spread of course) as they lit in the wheat field they carried the grain down with them. Unfortunately we have not trained them to light in the same place when coming into a grain field.

"There is no doubt but what the birds will eat waste grain, grain that may have leaked out of grain cars along the railway or on the roadways where it has leaked or spilled from the wagon, this being the case more particularly when the ground is covered with snow. These birds do not light on grain stacks like the prairie chicken but feed in the stubble, the seeds of the pig weed (lambsquarter), wild buckwheat and other small seeds being what they favor most. Feeding habits of the Hungarians are almost identical with those of the Bob White quail. These birds are not as plentiful in the last few years in the western half of our province as formerly but there appears to be some indication of their return from the eastern half of the province where they have been plentiful for several years."

If you get stung by a hornet or bee, take a piece of raw onion and hold against the place. It draws the poison out and instant relief is yours.

GAME CROP IN PENNSYLVANIA

EACH biennial report of the Pennsylvania State Game Commission discloses the great value of the wild life resources of that state which have been so successfully conserved for the use and benefit of the people of the state. The American Game Protective Association has often declared that the system of combined refuges and shooting grounds inaugurated in Pennsylvania many years ago has maintained and increased the supply of wild life and at the same time has permitted its enjoyment and use by sportsmen to a marked degree. A recent bulletin of the association says two years ago the hunting license fee was raised from $1.25 to $2.00 by legislative act, the additional 75c to be used for purchase and maintenance of additional refuges and public shooting grounds. Three refuges were purchased and established in 1928 through the use of these funds aggregating nearly ten thousand acres of land. The state now owns and maintains 38 such refuges surrounded by public shooting grounds comprising a total area of 170,622 acres of land besides 69 auxiliary refuges and public shooting grounds which are held under leases, aggregating nearly 100,000 acres additional. The refuges are stocked annually with suitable varieties of game.

VIRGINIA BRINGS BACK HER QUAIL

TO ENCOURAGE the restoration of Bob White in many parts of Virginia where these delectable game birds have become dangerously depleted, the State Commission of Game and Fisheries has imported from Mexico and planted 10,000 Mexican quail. Major A. Willis Robertson, chairman of the Commission, announces that a survey of the quail situation in Virginia will be carried on during the season. All game wardens and other employees of the Commission will be utilized in collecting information. The assistance of sportsmen's clubs will be furnished. The Commissioner states that the success of the undertaking depends to a considerable degree on the help and cooperation of sportsmen and land owners. The result of this survey will be looked for with interest by sportsmen in other states.

When you meet a stray cat in the woods or fields, wait until you see the green in his eyes and then use your own judgment.

DODGE THE GAME BIRDS

ON THE highways and byways throughout the pheasant country the motorist sees brilliant splashes of green, red and black or patches of brown beside the road. They have fluttered from the weeds in front of a speeding car and their trim bodies have been hurled lifeless to the ground. Killing of game birds by motorists is wanton waste. No real sportsman will indulge in the practice or countenance it. Most of the time the driver, with but little inconvenience, could avoid it. Not realizing the speed with which the automobiles are traveling, the game birds, often startled from the weeds by a savage roar, flutter upward into the path of the machine. Not always can they be avoided, but most of the time the driver can see them long before he approaches and the honk of the horn will send them scooting out of his path. Young hatches of pheasants are making their appearance and not infrequently is the motorist confronted by a hen leading her brood of tiny chicks across the road. To plow ruthlessly into them is slaughter.

There is nothing that attracts human nature more powerfully than the sport of tempting the unknown with a fishing line.—Henry Van Dyke.

AN APPEAL

DR. T. GILBERT PEARSON, president of the National Association of Audubon Societies, has issued an appeal for much needed and deserved support of conservation agencies.

"There is not a conservation association in America," said Dr. Pearson, "but what needs most desperately additional financial support. Every day we read of large funds being donated or bequeathed to churches, colleges, hospitals, art museums and other worthy institutions. Why have we not been able to engage the more generous support of wealthy men and women? To considerable extent we conservation organizations occupy a position of guardianship of wild life worth billions of dollars in money, and of fabulous value in beauty, sentiment and inspiration.

"To the men and women of America I make this appeal: Give us your cooperation. We have the experience, our organizations have shown honesty and capability, and our people are eager and willing to work. You have means. Here is your opportunity to take a part in one of the most blessed and worthwhile undertakings in which mankind can engage."

The man who has accomplished all that he thinks worth while, has begun to die.—Ernest T. Trigg.

CALIFORNIA PLANTS GRAYLING

W. H. SHEBLEY, chief of the division of fish culture of the California Fish and Game Department, has made a plant of 40,000 grayling in the lakes of Yosemite National Park as an experiment to determine whether or not this fish will thrive in California waters. The attempt has been made heretofore to establish the grayling in California but has never been successful. Grayling were formerly plentiful in Michigan but have disappeared from the waters of that state. They are plentiful in Montana. Many of the streams of Alaska abound in grayling.

DEER TAGS IN CALIFORNIA

CALIFORNIA has an excellent law requiring that all persons hunting deer shall purchase a deer tag license. The tags are issued in duplicate, one to be attached to the carcass of the animal killed, the duplicate to be forwarded to the State Fish and Game Department. This law makes certain that the annual legal kill of deer in that state will be definitely known. Every state should have similar provisions for collecting accurate information as to its annual kill of game.

Here comes another trout that I must tickle daintily.—Beaumont and Fletcher.

PESSIMISM VERSUS OPTIMISM

PESSIMISM is a destructive force. It has to its credit, all down through the ages, nothing but failure. It is the voice of Calamity crying, "It can't be done." It is the greatest handicap that genius has to overcome. It is the evil spirit opposed to progress.

On the other hand, faith, hope and courage—the component parts of Optimism—together with a reasonable amount of applied energy, accomplish the impossible. It was Optimism that discovered America; it was Optimism that taught us how to fly; it was Optimism that gave us the telephone, electricity and the radio. Eliminate Optimism from the affairs of men and man is dead.

What has Pessimism ever done for the world?

A sportsman is an optimist; it must, of needs, be so and still occasionally one finds associating with sportsmen and claiming to be one of them, a chronic pessimist. "This can't be done." "That can't be done." "This wasn't done right." "That wasn't done right." The man who can demonstrate how a thing might be done better is a critic—a very useful person—but the man who simply complains and "knocks" and finds fault is a pessimist or worse.

Sportsmen of Montana have undertaken a constructive program that calls for faith, hope and courage—and not a little energy. There is no place in the movement for the pessimist.

Let us build, and build together. If there is anything wrong with the plans, that fact will be developed and corrected in ample time. If the master builders are lacking in skill or intelligence, it will be time enough to displace them when someone else has proved that he is a better man.

But let the building be a monument to the efforts of the many and not to the sacrifices of a few.

"Teach your sons to ride, to shoot and to speak the truth."—Old Persian Maxim.

EXTINCTION

EXTINCTION, when applied to one of our native species of wild life, is a tragic word; it means blotting out, the pushing into oblivion of one or more species of those which help to make more interesting our plains, our forests, our lakes.

Western states can inscribe on this black-bordered list the marten, the wolverine, the trumpeter swan, the passenger pigeon and several of the shore birds.

The Atlantic states were formerly the home of the eastern representative of the prairie chicken, the heath hen. The progress of civilization was ruthless, however, and in 1890 there were only about two hundred left, and these were confined to Martha's Vineyard, an island in Massachusetts. In 1907 this number was reduced to about 75, and with the help of strong protective measures the total was brought up to an estimated three hundred in 1910.

Now, in 1929, we hear that there is only one solitary heath hen left in the world—will we, in Montana, allow our counterpart of the heath hen, the prairie chicken or pinnated grouse, to become also a museum specimen?

Sam Anderson, recently appointed to the Federal Migratory Bird Commission, fears for the future of that splendid game bird, the prairie chicken. He asks that the future of this bird be carefully considered by individual sportsmen, by conservation organizations, by all those who desire that it remain something more than a memory in the minds of the older generation. There are a few coveys left in favored spots in the state and it would be good sportsmanship on the part of the resident hunters in those areas to join in a demand for a further closed season on this vanishing bird.

Hunters Increase by Millions

MONTANA will doubtless set a new record this year in total hunting and fishing licenses issued because of increased tourist travel and greater attention paid to fish and game resources of the Treasure State. During the season 1927-28 more than 6,450,000 hunting licenses for the taking of wild game were issued to sportsmen throughout the United States, including Alaska, and the revenue to the states amounted to more than $9,300,000. New York state, with 675,780 licenses and $699,873 in money returns, and Pennsylvania, with 517,729 licenses and a revenue of $1,006,159, headed the list.

Detailed figures for the 1928 season compiled by the Bureau of Biological Survey of the United States Department of Agriculture show substantial increases in numbers of licenses issued and fees received over the preceding three years.

In the 1924-25 season, 4,904,740 hunters paid for their licenses a total of $6,190,863, while in 1925-26 hunting licenses to the number of 5,168,353 were issued, bringing a revenue of $6,872,812 to the states.

Licenses issued in 1926-27 numbered 5,987,505, and the fees paid were $8,155,535. The complete figures for the season 1927-28 are given in the following table:

LICENSES ISSUED BY STATES, WITH MONEY RETURNS

State	Resident	Non-Resident or Alien	Money Returns‡
Alabama	86,843	201	99,858.00
Alaska†	.....	268	$ 18,870.00
Arizona	38,134	631	52,449.35
Arkansas	100,006	1,500	117,500.00
California	226,109	2,587	464,145.00
Colorado	* 107,305	420	227,612.50
Connecticut	37,212	712	103,402.00
Delaware	* 1,970	344	5,410.00
Florida	59,440	581	223,154.25
Georgia	79,592	211	108,781.84
Idaho	* 75,730	352	150,567.85
Illinois	303,567	1,500	319,317.00
Indiana	* 310,204	* 517	287,058.80
Iowa	* 164,647	363	168,277.00
Kansas	115,165	92	116,545.00
Kentucky	108,202	79	109,031.50
Louisiana	102,411	242	108,536.00
Maine	* 39,979	3,544	71,578.55
Maryland	69,025	1,841	132,834.55
Massachusetts	107,615	2,881	231,427.00
Michigan	362,808	2,465	530,196.48
Minnesota	118,001	234	127,497.40
Mississippi¶	.....	.....	.....
Missouri	* 231,101	* 789	275,908.12
Montana	* 75,063	261	155,736.00
Nebraska	* 163,447	* 133	166,772.00
Nevada	5,327	151	9,410.50
New Hampshire	* 55,401	* 2,319	109,576.35
New Jersey	* 183,280	* 1,941	266,427.10
New Mexico	* 15,971	* 1,444	79,660.25
New York	* 670,441	* 5,339	699,873.52
North Carolina	144,274	994	207,900.00
North Dakota	35,108	163	56,737.00
Ohio	368,377	108	369,997.00
Oklahoma	153,001	331	157,918.00
Oregon	* 57,407	* 779	210,711.75
Pennsylvania	515,948	1,781	1,006,159.70
Rhode Island	10,342	243	21,527.00
South Carolina	111,070	1,294	167,590.00
South Dakota	* 101,508	2,680	174,938.00
Tennessee	63,026	280	78,527.32
Texas	104,703	488	221,606.00
Utah	* 40,792	* 140	93,663.00
Vermont	* 37,208	* 1,058	54,711.30
Virginia	116,133	2,565	199,6387.40
Washington	* 201,372	* 703	371,356.00
West Virginia	* 141,706	445	148,381.00
Wisconsin	172,667	462	189,892.00
Wyoming	* 24,822	* 645	69,507.50
Total	6,413,454	49,102	$9,338,173.88

‡Includes amounts received from combined hunting and fishing licenses, but not from licenses to fish only. *Includes combined hunting and fishing licenses. †No resident license required. ¶Figures not available.

September Fish Best

SUMMER TIME has about passed and with it the oppressive heat which affected man, bird, beast and fish. It is true that mid-days are still hot, but along toward evening when mist wraiths spiral in ghostly forms from the surfaces of lakes and rivers one scents the autumnal season.

Fish of all species are becoming increasingly eager to feed. Fortunate is the angler who has deferred his annual fishing trip until September. For the last few years this month has held the record for pleasant weather in most sections of the country. While the enthusiastic angler does not mind an occasional shower or storm, and can, if necessary, put up with an actual downpour, nevertheless every one prefers pleasant weather and there is no finer time to fish than early autumn.

In Montana the trout season extends until March. One who can arrange a trout fishing trip is likely to enjoy some better than average fly fishing.

Black bass, both large and smallmouth, should be interested in artificial lures as well as live bait.

Game fish are unusually active both in feeding habits and when hooked on the angler's lure. Colder water and brisk weather are responsible. A September game fish is well worth catching and may furnish a bigger thrill than one of like size and species caught in August.

Nesting Time

IT WAS nesting time for Mr. and Mrs. Mallard in Montana when this splendid picture of Mrs. Green H. Mallard was taken by Joe B. Halm of Missoula, whose pictures of wild life have added much to the enjoyment of sportsmen who read MONTANA WILD LIFE. He hunts with a camera rather than a gun.

Mink and Rabbits Mean Money

FUR farming is gradually becoming one of Montana's thriving industries. Efforts being put forth by the State Fish and Game Commission are intended to enable legitimate fur farmers in enlarging their scope of activity and in like manner, to curb the activities of those who scoff at legal regulations. One of the state's interesting fur farms is that conducted by Donald Strong in the Livingston area. He's making good. On a recent trip of inspection P. W. Nelson, the oldest deputy game warden in the state from point of service, found conditions in which he believed readers of MONTANA

Female Montana Mink

WILD LIFE interested. He has submitted the accompanying pictures. Mr. Strong has 80 Montana mink raised in captivity and hundreds of rabbits whose fur will soon be transformed into fur garments for Milady.

The Castor Rex rabbits which have been imported from France by Mr. Strong at enormous expense, according to an explanation by C. A. Gelbke of Appleton, Wis., is a breed with a future. Writing in the American Fur Growers' Magazine, Mr. Gelbke writes as follows:

"Castor-Rex, meaning Beaver King, will be the most popular rabbit in the future, due to its fur and meat value. In Europe they have argued about this question for years, and scientists were doubtful at first whether this fur could be maintained in the offspring of the original stock, and whether continued inbreeding would not cause degeneration and turn into failure. Today the men who were at first skeptical are now the most enthusiastic supporters to encourage the breeding of Castor-Rex.

"Color-Rex means any popular shade that resulted from crossings with the original Castor-Rex stock. For instance, Chin-Rex are so promising that a large breeder in Europe, for a full-blooded pair five months old, paid 1,000 German marks, which is about $250 in American money. I have German clippings showing where a Scandinavian buyer wants 3,000 Castor-Rex rabbits.

"American critics believe that the present Castor-Rex does not amount to much, which I believe is true so far as the average grayish-brown is in question; but due to the fact that the Rex fur quality can be bred into all popular shades we do not need to worry about that. The owner of the original Castor-Rex stock is in a position to create any desired kind of Color-Rex. White-Rex will be popular because of the close resemblance to ermine, and the ease in securing uniformity of the pelts. Next will be the Brown Beaver-Rex, with their deep-brownish tan-dipped and bluish gray-based fur. They resemble the real beaver fur very closely.

"Present day beaver-imitation fur is mostly clipped and dyed rabbit fur, without the blue base of the real beaver fur.

"Chin-Rex will be very popular because they resemble the South American woolmouse much closer than our present standard Chinchilla. The Black Otter-Rex should also have a good future.

"In crossing a male Castor-Rex and a doe of any other breed we call the resulting offspring half-breeds. In case this litter should have a pair of the desired color, this pair, being brother and sister, can be mated and the resulting offspring will mostly have the characteristics of their parents. After this

Castor Rex Rabbits

further inbreeding should be avoided and line-breeding should be practiced. Survival of the fittest should be the motto of the breeder.

"Large pens for the growing stock, plenty of sunlight and a well-balanced diet, will make thrifty and prolific stock."

Montana's Legacy

A LEGACY left to all true Montanans by the revered pioneers is a strain of sporting blood, says the Montana Standard of Butte. Those who have come after and who make no claim to kin with the hardy race that laid the foundation of this commonwealth have gained that strain through the inspiration brought by the recital of Montana history.

An official organization close to the hearts of most Montanans because its purpose is to maintain the great virgin areas of the state as a sportsman's paradise is the Montana Fish and Game Commission. That state agency now is launching its work for the season of 1929. To it those devotees of stream and forest, who spend so many happy days in the open at a sport which enthralls, may give thanks for their incomparable pleasures.

The hunting and fishing license issued by the Commission for a fee is not a tax upon the pleasures of those who love the out-of-doors and its sport. It is rather a contribution to the maintenance of Montana's fishing streams and the supply of game on her forest-crowned mountains. The Commission has carried on its work admirably. Each year sees more and more fishermen on the banks of the streams. Each autumn finds more sportsmen on the track of deer. But for the efforts of the Commission the streams would be barren of fish and the forests devoid of game.

Aiding and assisting the State Commission in its laudable work are many sportsmen's organizations throughout the state. Notable among them is the Butte Anglers' Club. These organizations have contributed largely to the general effort to preserve Montana as a land of sportsmen. Every one who loves such recreation as here described, beyond the power of wealth to purchase in most parts of the world, should be affiliated with the Butte Anglers' Club. The fees are nominal but the results of the club's work are inestimable in perpetuating this sportsmen's paradise.

"Keep On Keepin' On"

If the day looks kinder gloomy,
And your chances kinder slim;
If the situation's puzzling,
And the prospects awful grim,
And perplexities keep pressin'
Till all hope is nearly gone,
Just bristle up and grit your teeth
And keep on keepin' on.

Shunning never wins a fight
And frettin' never pays;
There ain't no broodin' on
These pessimistic ways.
Smile just kinder cheerfully,
When hope is nearly gone
And bristle up and grit your teeth
And keep on keepin' on.

There ain't no use in growlin'
And grumblin' all the time
When music's ringing everywhere
And everything's in ryme.
Just keep on smilin' cheerfully
If hope is nearly gone
And bristle up and grit your teeth
And keep on keepin' on.

WILL IT COME TO THIS?

Lindy (in 1930): I can't be home until late, dear; I have to sit up with a sick friend in Cuba.

Treaty Protects Swans In U. S.

EXPLAINING why no open season on swans had been provided in the recent amendments to the regulations under the Migratory-Bird Treaty Act, Paul G. Redington, chief of the Biological Survey of the United States Department of Agriculture, asserts that he considers that to recommend an open season in the United States at this time on these beautiful and comparatively rare birds would be a violation of this country's obligations under our treaty with Great Britain.

Many requests had come to the Biological Survey to allow limited shooting of swans, the plea being made that they were destroying wildfowl food plants by pulling them up by the roots in such quantity to menace the future supply for other waterfowl.

Answering this charge specifically, Mr. Redington said that investigations made by the Biological Survey do not show that swans destroy wildfowl food to any greater extent than do other species of waterfowl.

In fall and winter they take the parts they like, but leave sufficient seeds, fragments of rootstocks, tubers, etc., to insure reproduction of the food crops the next season.

"If this were not true," he stated, "swans would be compelled to abandon their favorite wintering grounds, and the fact that they do not do so, but instead return to them year after year, is really a guarantee that their feeding habits are not so pernicious as is believed."

Swans have been given complete protection throughout this country, Mr. Redington explained, for two reasons. In the first place the total number of our two species combined is not large, and in the second place, as practically all the swans of eastern North America winter in a limited area in the Middle Atlantic States, irreparable damage to the species would result if shooting were permitted.

"Of the two species of swans," he said, "the trumpeter swan has been for years near the verge of extinction. Owing to the fact that it is impracticable to expect the average gunner to distinguish between the trumpeter and the whistling swans, it has seemed necessary to give all swans close protection. The Biological Survey has given the situation the most careful consideration, which it greatly deserves, since an error at this stage might very well result in the total extermination of a rare and valuable species.

"We must not lose sight of the fact," he added, "that swans are wildfowl and even while entirely protected are entitled to a share of the common food supply. In other words, the swans should not be held guilty of stealing food that does not belong to them.

"The complexities that enter into the situation are due to the increasing popularity of the sport of duck shooting and to the fear that swans may be unduly damaging the feeding grounds of wild ducks.

"The consumption of wild duck foods and of baits by swans is one of the hazards of the sport of duck shooting under existing conditions, and it is impossible by regulation to arrange every detail of the whole problem to the entire satisfaction of everyone. The swan is entitled to a charitable attitude on the part of the gunner, especially in view of the bird's rarity and its unique qualities."

The Biological Survey is keeping the matter under investigation with a view to safeguarding the species for the enjoyment not only of the present generation but of those to follow in later years. Mr. Redington closed his statement with a plea for the sympathetic consideration of all sportsmen, "in view of the rather precarious condition of the whistling swan and the still more dubious situation of the trumpeter swan." Swans enjoy similar protection in Canada, under the terms of the treaty protecting birds that migrate between the two countries.

Coyotes Overrunning Alaska

WILD animals, as well as human beings, are disposed to migrate and to occupy new territory which may appeal to them as offering more possibilities than their previous habitat. Alaska is experiencing a manifestation of this tendency in an unwelcome invasion by the coyote, common to our western plains but until recently unknown in the far North. The first coyotes entered Alaska in 1915, it is claimed, finding their way from Yukon Territory in northern Canada into the headwaters of the Tanana River and down the valley of that stream until now they have penetrated the Valley of the Yukon throughout almost its entire length and have invaded other sections of Alaska, including the Valley of the Porcupine of the north and the Kenai Peninsula of the south. They have invaded the headwaters of the Kuskokwim River and are preying upon the reindeer which graze in the vicinity of Norton Bay.

Fur-bearing animals suffer from this invasion, particularly the fox, which are frequently entirely driven out of their normal range, and the fur industry which depends greatly upon the fox suffers accordingly.

The great breeding area of migratory waterfowl in the Delta of the Yukon is threatened. The devastation which might reasonably be expected should these animals overrun the nesting grounds of waterfowl would seriously impair the normal hatch of birds.

Alaska and the Department of Agriculture of the United States Government are keenly alive to the situation. Congress has made an appropriation of $5,000 for the present fiscal year to carry on predatory animal control work in Alaska, which has been supplemented by an appropriation of $30,000 by the Territorial Government of Alaska for the biennial period ending March 31, 1931.

The control work is being carried on cooperatively by the Alaska Territorial Government and the United States Department of Agriculture, and the utmost effort will be made within the limits of the funds available to establish effective measures for checking the spread of these predatory creatures. Trained trappers and hunters are being employed and in addition detailed instruction is being given to native trappers as to the best methods of killing coyotes.

Wolves also occasionally create havoc in game herds of Alaska but there is no great danger of their spreading and increasing in numbers to such an extent as the smaller predator. Wolves are known to have killed many reindeer during the past winter but it is not expected that they will be as serious a menace as the coyote is.

TO A SHOOTING PAL

Many days along the beaches
Through the mists and through the fog,
Through the moonlight and the sunshine,
With decoys and gun and dog.
Many years may you enjoy them
Through the crimson, golden fall,
Until God, the Great Game Warden
Puts a closed-time on us all.

A LITERAL-MINDED STENOGRAPHER

A new clerk, dictating a few days ago, was in doubt as to the use of a certain phrase, so he said to the stenographer:

"Do you retire a loan?" and the wistful eyed on replied sheepily:

"No, I sleep with mamma."

The Sportsman and the Pack-horse

By RAY PALMER TRACY, Prize Winner in the Story Contest of Western Out-of-Doors

ROMANCE and adventure which attended the lives and travels of the early pioneers did not all center around the covered wagon. The water-cooled grass-burner loaned his back and nimble legs to exploration that the covered wagon would have needed wings to follow. Long after the covered wagon became a museum piece, it was a common sight to see strings of pack-horses and impromptu rodeos around frontier supply stores.

With the construction of roads into remote mines and agricultural territory, the importance of the pack-horse dwindled. As an aid to progress, his services were mostly confined to stockmen and prospectors. However, he continued to be the sportsman's friend.

When automobiles in terrifying numbers began their war with loads of hay on country roads, a large percentage of pack-horse sportsmen, delighted with the new mode of swift travel, adventured on cushions for a time. The wilderness horse corrals supported by them fell into decay. The pack-horses were turned out on the range. But the pendulum is swinging back. Once again, picturesque, white-crowned pack-strings are hitting into the wilderness areas in increasing numbers. The real sportsmen are brightening up the dim trails of yesterday into the country beyond.

There is a primitive grandeur about a horse. He is so big, so strong, so intelligent. It strengthens the right sort of man physically and mentally to associate with one. To the novice, he is a constant source of wonder. He can negotiate thickets and crawl through amazing pole patches. He can scramble up slopes that will try the agility of his packer.

The pack-horse soon teaches the novice to respect him. It is rather humiliating to a conceited nature possessing a doctor's degree to find his pack-horse—who has never been in a seat of learning—is competent to tutor him in one of the oldest sciences known. I refer to the manner in which a pack-horse carries the sportsman back to the primitive days and makes a first-class tracker of him.

Any of us pack-horse sportsmen remember all about that day up on the divide of The Big Rock Candy Mountains. The sun had barely chased the frost from our blankets when we became aware of an unusual silence. We wondered why it was so quiet—a deeper sense of remoteness. Presently, we discovered that we could not hear the clang of the bell. We knew mighty well that we had hung that bell on the neck of Lazarus—our old white pack-horse.

We got right up out of our blankets. No; Lazarus was not standing on three legs under a tree waiting for us to get up and grease him with a bacon-rind before the flies thawed out and got busy. That morning, he was strangely absent—darn his picture! And we had planned on a long dash over to Paint Rocks. Moccasin telegraph had rumored that a rare specimen of the cigarette tree grew there.

We took a feverish walk and assured ourselves that the calamity was a fact. Lazarus was indeed gone. Outside of damning our missing porter and all his Missouri relatives back for ten generations, there was only one thing to do. We snatched a bite to eat and set out in true pioneer style to hunt for the wanderer.

We climbed a high point and looked around, all the time listening for the tons of the bell. Nothing doing. We cut a wide circle, keeping a sharp lookout. Mostly our eyes were glued to the ground, searching for tracks.

Hallelujah! There were his hoof-prints heading for the pass. Up hill and down dale, we opened and shut like a pair of scissors. We lost the line of tracks on a rocky ridge. Unhappily, we searched for an hour. Remember how pleased we were, and how proud of ourselves, when we picked up the trail where Lazarus had doubled back.

The fact that Lazarus was wearing hobbles seemed to give him wings. But at last we saw him standing under a tree. There was a sorrowful expression in his eyes as we came up. He looked as though he thought he had been betrayed because we had not given him his daily greasing sooner. The sun was low when we got him back to camp. But remember how hungry we were, and how good we felt over our tracking achievement.

There is a satisfaction in tracking down a pack-horse. It is an operation that links the sportsman with the primitive as nothing else can. Tracking down a bear or deer has lost some of its significance since pioneer times. The pioneer had to track his meat and clothing or starve and go naked. The sportsman only snorts with disgust when he loses the game trail and notes it is going to storm. He goes back to a well-equipped camp, changes his wet clothes and cuts a few extra slices of bacon into the pan. But like the pioneers with his necessities, the sportsman has to track down his missing transportation.

The pack-outfits are the aristocracy of the hills, just as the cavalry is the class of the ground soldiers. Interest and romance always follow the trail of picturesque mobility. And the country that can be covered with the pack-horse is only limited by time and desire.

The sportsman with a pack-outfit, roaming a wide scope of country, finds many avenues of interest aside from game and fishing. Always, around the fringe of the wild, and sometimes in deeply hidden canyons, he is continually stumbling on members of that hermit-minded tribe of men who get as far as they can from civilization and still enjoy some of its comforts. The nature and variety of experiences that these characters can unfold will take the mind off of business cares and sickness in the family.

I ran across one tall old fellow with delicately chiseled features. He was living in careless squalor in a cabin of a deserted mining camp up in the Bitter Root Rockies of Montana. His chief occupation seemed to be chewing tobacco. How he happened to have a little old organ in one corner of his shack, I'm still wondering. Too, it was literally plastered with dried tobacco juice. That part of the mystery was soon cleared up. Every time my host began a fresh story, ended a paragraph in the yarn he was spinning, and often in an effective pause, he would turn his head and use the organ for a spittoon.

There was a stirring story locked up in that organ if one could find the key. It was evident in the earnestness

The Bloodless Sportsman

I go a-gunning, but take no gun;
I fish without a pole;
And I bag good game and I catch such fish
As suits a sportsman's soul.
For the chiefest game that the forest holds,
And the best fish of the brook.
Are never brought down by a rifle shot,
And are never caught with a hook.
I bob for fish by the forest brook,
I hunt for game in the trees,
For bigger birds that wing the air,
Or fish that swim the seas.
A rodless Walton of the brooks,
A bloodless sportsman, I.
I hunt for the thoughts that throng the woods,
The dreams that haunt the sky.
The woods are made for the hunters,
The brooks for the fishers of song.
To the hunters who hunt for the gameless game,
The streams and the woods belong.
There are thoughts that roam from the soul of the pine,
And thoughts in the flower-bell curled;
The thoughts that are blown with the scent of fern,
Are as new and as old as the world.
So, away, for the hunt in the fern-scented wood,
Till the going down of the sun.
There is plenty of game still left in the woods
For the hunter who has no gun.
So, away, for the fish, by the moss-bordered brook,
That flows through the velvety sod;
There are plenty of fish still left in the streams
For the angler who has no rod.

of the old man's disrespectful attentions. Each time an accurate stream of brown juice went winging on its way, he watched its flight with grim interest. As it splattered on the target, his lips would tighten for an instant with bitter approval. I was dying to ask about the organ, but mountain code forbade. Instead, I listened to tales of the Montana gold camps—Virginia City, Cook City and Sunrise Gulch—he had seen them all. He made them live again in a throbbing afterglow.

Farther south in the Snowy Range of the Rockies I met other strange characters in my pack-horse excursions. In the wilderness stretches west of the Wyoming Laramie Plains, I made contact with another old miner. The glorious days of his youth had been expended as a cowboy. Once he had been marked for slaughter by the hired killer, Tom Horn—later hung at Cheyenne. The story of his hair-breadth escape lives in my memory as one of the most graphic bits of description I ever have heard.

Again, down in the Craggies of the Oregon Siskiyous, it was my fortune to meet an escaped ex-slave. At the age of nearly a hundred years, this tall old negro was keeping alive the traditions of the California gold rush of forty-nine. He employed his time hunting for gold pockets along the Rogue River. His tales of San Francisco when lots could be purchased on Market Street for fifteen dollars, were extremely colorful. His Indian stories were even more so. Again and again, in these latter tales, he used the expression: "Ma har riz right up!" Looking at his funereal face and fringe of kinky white wool, there was humor as well as color in his gossipy history.

No matter where the wilderness area lies into which the pack-horse sportsman penetrates, in one respect, the experiences are the same. The unexpected lies over every ridge of the country beyond. It may be a quaint character locked within himself and natnre. It may be a sweeping vista of scenic beauty with lights and shadows, haze and sunshine, wrapped in the grandeur of solitude. It may be a lovely mountain glade flashing the scarlet and gold of flowers. Perhaps it may be seldom-seen glaciers, crater lakes or clear streams at the head of a watershed, alive with fish. Whatever it is, for the time being, it belongs, exclusively, to the drifting disciple of the pack-horse.

The pack-horse sportsman is the most free of all humans. He can go anywhere in comparative comfort. It is cheap, even if he has to buy his entire outfit, including the horse. There is no such a thing as a second-hand horse. The wear and tear of a long hard trip are nothing to him. If he is treated right, he will get fat and increase his salability during the jaunt. Unlike the automobile, he is self-supporting and grows his own repairs. Hobble him in a grassy park and he will fill his own fuel tank. He will hunt up a spring and water his own radiator without a hint from any one.

The simple foodstuffs that go to make up the larder of a pack-outfit cost but little. There are no hotel bills or any dispensation of tips. There will be no tooting of horns or yells of late arrivals to camp grounds. The pack-horse sportsman slips back into a quiet generation where he has to do everything for himself while the rest of the world whizzes by. Let it whiz. For a period of rest and recreation, he can neither hear, see, smell or feel it. Thank God!

Believe It or Not

Hardy, a little town in northern Montana, isn't so big, but when it comes to fish, then Hardy claims a fish story of its own. When the Great Northern railroad trains stop for water at the tank, the engineers and firemen must take extra precautions or the steam from their engines is going to smell of boiled trout. Fish, fish, everywhere. The water in Hardy Creek ran low, and because of the crowded condition, the fish followed a pipe line into the water tank and now an abundant school of the finny creatures swim nonchalantly about as the trains take on water and the firemen try to shoo the fish away from the spout.

OMIT SOME

She: "I can read you like a book."

He: "Well, you'd better skip some of the chapters."

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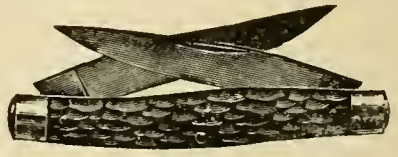

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Veteran Game Club

ONE of the oldest sportsmen's clubs in America is the Montgomery County Fish and Game Protective Club of Dayton, Ohio, its record of activities having extended over 43 years. The 43rd annual outing of this organization was held on June 28 at the Amateur Trapshooters' Association grounds at Vandalia, Ohio. Many contests, including trapshooting, were enjoyed. John W. Thompson, chief of the Division of Fish and Game of Ohio, was the principal guest.

The object of this club as laid down at the time of its organization nearly a half century ago is stated as follows:

"The object of this club shall be the protection of all game, game birds and fish, and also the protection of song and all insectivorous birds beneficial to agriculture and horticulture; to procure the enactment of judicious and effective laws for such purposes; to maintain a vigilant supervision over the public officers elected or appointed to carry into effect all laws enacted for the propagation and protection of birds, game and fish; to rigidly enforce the laws so enacted, and also for the social and recreative advancement of its members."

This club has the unique distinction of having had the same man at its head throughout almost its entire history of 43 years, Edwin Best having served as president from its organization in 1886 to 1924, or 38 years.

Bear In Alaska

NEW regulations governing hunting and trapping in Alaska went into effect July 1. The closed season on caribou north of the Arctic Circle has been removed in order to accommodate residents of that territory, both native and white, who must necessarily depend upon game for their meat supply. A bag limit of five animals to each person is retained. Non-residents are permitted to kill only one caribou a season on the Alaskan peninsula.

Protection of the large brown and grizzly bear on Kodiak and neighboring islands has been relaxed in response to an appeal from residents engaged in agricultural pursuits who are now permitted to kill grizzly or brown bear at any time or place when such animal is considered a menace to persons, live stock or property. A former provision permitting the killing of bear when found within a half mile of a residence has been changed to read one mile and applies to the whole territory.

Additional restrictions have been placed on trapping. In southeastern Alaska mink may be taken only during January and on the Kenai peninsula the season has been closed on mink for a year. Beaver and marten trapping is closed indefinitely.

Non-resident hunters are required to have guides who are licensed by the territorial game commission.

Flathead Birds

LEE H. KIMMEL of Kalispell, well known Montana sportsmen, writes the following interesting review of the game bird situation in the Flathead district:

"I have made a close survey of our game birds while shooting gophers, magpies, crows, hawks and owls. I have fired close to 15,000 shots this year and I am sure I have killed better than 85 per cent, using a .22 rifle. The farmers pay for the cartridges, which are cheap for them, because I am positive I saved them ten times what it cost for the ammunition.

"I started a count on the Chinese this spring when the young were large enough to run around. I counted 906 young Chinks, 571 young Huns, 266 young native pheasants and 92 Bob Whites. This covers a period of three months and nine days.

"I was at Great Falls and on my way home coming up on the west shore of Flathead Lake just west of Dayton I counted 21 coveys of pinnated grouse along the road. Coming up the road about 10 or 15 miles farther I counted 41 native pheasants. On the North Fork of the Flathead River fishing I counted 59 native pheasants in the road and 17 fool hens.

"Yesterday I was out shooting magpies and killed 19 of them and three crows. While I was putting Mag's lights out the Chinks were getting up all around me. Young and old ones were going every direction. There are worlds of Chinks this year and there seems to be many Huns also.

"I was talking with the assistant supervisor of the Flathead forest and he says he is positive there are more native pheasants and fool hens this year than for several years. We have had a very dry season and this spring was ideal for the birds to hatch and mature."

THE SAME OLD LAD

'Tis the same old stream that used to be,
When I was a toddling boy.
'Tis the same old bank that I strolled along
A-whistling my notes of joy.
'Tis the same old bend, the same old point
Where I tossed my bobber out.
'Tis the same old place that a hundred times
I've told my kid about.

—Allen Ayrault Green.

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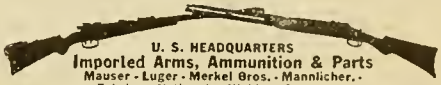

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America's Big Game Problem

By L. W. T. WALLER, Jr.

DAYS of wild animals in any region are numbered whenever man takes possession of it. This is shown most plainly by the history of wild creatures of North America. At the time of its discovery and occupation by Europeans, this continent and the bordering seas teemed with an almost incredible profusion of large mammalian life. The hordes of game animals which roamed the primeval forests and plains of this continent were the marvel of early explorers and have been equaled in historic times only in Africa.

Even beyond the limit of trees, on the desolate Arctic barrens, vast herds containing hundreds of thousands of caribou, drifted from one feeding ground to another, sharing their range with numberless smaller companies of musk-oxen. Southward from the Arctic barrens, in the neighboring forests of spruce, tamarack, birches and aspens, were multitudes of woodland caribou and moose. Still farther south, in the superb forests of eastern North America, and ranging thence over the limitless open plains of the West, were untold millions of buffalo, elk, and white-tailed deer, with the prong-horned antelope replacing the white-tails on the western plains.

With this profusion of large game, which afforded a superabundance of feed, there was a corresponding abundance of large carnivores, as wolves, coyotes, black and grizzly bears, mountain lions, and lynx. Black bears were everywhere except in the open plains, and numerous species of grizzlies occupied all the mountainous western part of the continent.

Fur-bearers, including beavers, musk-rats, land-otters, sea-otters, fishers, martens, minks, foxes, and others, were so plentiful in the New World that immediately after the colonization of the United States and Canada a large part of the world's supply of furs was obtained here.

The wealth of mammal life in the seas along the shore of North America almost equaled that on the land. On the east coast there were many millions of harp and hooded seals and walruses, while the Greenland right and other whales were extremely abundant. On the west coast were millions of fur seals, sea-lions, sea-elephants, and walruses, with an equal abundance of whales and hundreds of thousands of sea-otters.

Many of the chroniclers dealing with explorations and life on the frontier during the early period of the occupation of America gave interesting details concerning the game animals. Allouez says that in 1680, between Lake Erie and Lake Michigan, the prairies were filled with an incredible number of bears, wapiti, white-tailed deer, and turkeys, on which the wolves made fierce war. He adds that on a number of occasions this game was so tame that it was necessary to fire shots to protect the party. Perrot states that during the winter of 1670-1671, 2,400 moose were snared on the Great Manitoulin island, at the head of Lake Huron. Other travelers, even down to the last century, give similar accounts of the abundance of game.

The original buffalo herds have been estimated to have contained from 30,000,000 to 60,000,000 animals, and in 1870 it was estimated that about 5,500,000 still survived. A number of men now living were privileged to see some of the great herds of the West before they were finally destroyed.

It is probable that antelope were even more abundant on the plains than were buffalo. The latter, being large and black, were to be seen at great distances, whereas the smaller "camouflaged" animals might be passed by unnoticed.

The wealth of animal life found by our forebearers was one of the great natural resources of the New World. Although freely drawn upon from the first, the stock was little depleted up to within a century. During the last one hundred years, however, the rapidly increasing occupation of the continent and other causes, together with a steadily increasing commercial demand for animal products, have had an appalling effect. The buffalo, elk and antelope are reduced to a pitiful fraction of their former countless numbers.

Practically all other large game has alarmingly decreased, and its extermination has been partly stayed only by the recent enforcement of protective laws. It is quite true that the presence of wild buffalo, for instance, in any region occupied for farming and stock raising purposes is incompatible for such use. Thus the extermination of the bison as a denizen of our western plains was inevitable. The destruction, however, of these noble game animals by millions for their hides only furnishes a notable example of the wanton usefulness which has heretofore largely characterized the handling of our wild life.

A like disregard for the future has been shown in the pursuit of the sea mammals. The whaling and sealing industries are very ancient, extending back for a thousand years or more; but the greatest and most ruthless destruction of the whales and seals has come within the last century, especially through the use of steamships and bomb-guns. Without adequate international protection, there is grave danger that the most valuable of these sea mammals will be exterminated. The fur seal and the sea-elephant, once so abundant on the cost of southern California, are nearly or quite gone, and the sea-otter of the North Pacific is dangerously near extinction.

Fossil beds of the Great Plains and other parts of the West contain eloquent proofs of the richness and variety of mammal life on this continent at different periods in the past. Perhaps the most wonderful of all these ancient faunas was that revealed by the bones of birds and mammals which had been trapped in the asphalt pits discovered not many years ago in the outskirts of Los Angeles. These bones show that prior to the arrival of the present faunt the plains of southern California swarmed with an astonishing wealth of strange birds and beasts.

The most notable of these are saber-toothed tigers; lions much larger than those of Africa; giant wolves; several kinds of bears, including the huge cave bears, even larger than the gigantic brown bears of Alaska; large wild horses; camels, bison (unlike our buffalo); tiny antelope, the size of a fox; mastodons, mammoths with tusks 15 feet long; giant ground sloths; in addition to many other species, large and small.

With these amazing mammals were equally strange birds, including, among numerous birds of prey, a giant vulture-like species (far larger than any condor), peacocks, and many others.

The geologically recent existence of this now vanished fauna is evidenced by the presence in the asphalt pits of bones of the gray fox, the mountain lion, the close relative of the bobcat and coyote, as well as the condor, which still frequent that region, and thus link the past with the present. The only traces of the ancient vegetation discovered in these asphalt pits are a pine and two species of juniper, which are members of the existing flora.

There is reason for believing that primitive man occupied California and other parts of the West during at least the latter part of the period when the fauna of the asphalt pits still flourished. The folk-lore of the locally restricted California Indians contains detailed descriptions of a beast which is unmistakably a bison, probably the bison of the asphalt pits.

The discovery in these pits of the bones of a gigantic vulture-like bird of prey of far greater size than the condor is even more startling, since the folk-lore of the Eskimos and Indians of most of the tribes from Bering Straits to California and the Rocky Mountain region abound in tales of the "thunder-bird"—a gigantic bird of prey like a mighty eagle, capable of carrying away people in its talons. Two such coincidents suggest the possibility that the accounts of the bison and the "thunder-bird" are really based on the originals of the asphalt beds and have been passed down in legendary history through many thousands of years.

Junkman: "Any rags, paper, old iron?"

Man of the House (angrily): "No, my wife's away."

Junkman: "Any bottles?"